

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF MISSOURI
WESTERN DIVISION**

PRO SERVICE AUTOMOTIVE, L.L.C.,)		
PRO PARTS AUTOMOTIVE, L.L.C.,)		
TOWNES STATON, and MARCIA STATON,)		
)	
Plaintiffs.)		
)	
v.)		Case No. 04-587-CV-GAF
)	
LENAN CORP.,)		
)	
Defendants.)		

ORDER

Presently before the Court is a Motion for Summary Judgment filed by the Defendant, Lenan Corp. (Doc. #54). The Defendant contends that it is entitled to summary judgment on the Plaintiffs' product liability claims because the Plaintiffs¹ have failed to prove the existence of a product defect as their proffered expert testimony is inadmissible. *Id.* Furthermore, the Defendant contends that it is entitled to summary judgment on the Plaintiffs' negligence claims because the Plaintiffs have failed to prove that the Defendant breached its duty of care to protect the Plaintiffs from injury. Upon careful consideration of the arguments presented by the parties, the Defendant's Motion for Summary Judgment is GRANTED.

¹Pro Service Automotive, L.L.C., Pro Parts Automotive, L.L.C., Townes Staton and Marcia Staton are collectively referred to as "Plaintiffs."

DISCUSSION

I. Facts

The Plaintiffs filed this action seeking compensation for the loss of a commercial building and its contents destroyed by a fire allegedly caused by a defective waste oil heater manufactured by the Defendant. (Doc. #1). On February 29, 2004, a fire occurred in the building located at 1320 North Highway 65, Carrolton, Missouri. *Id.* The building was owned by Townes Staton and was the principal place of business for Pro Service Automotive, L.L.C. and Pro Parts Automotive, L.L.C., two limited liability companies owned and operated by Townes and Marcia Staton. *Id.*, *See also* Doc. #59. On the subject premises, the Plaintiffs had installed a waste oil heater designed and manufactured by Lenan Corp., known as the Lanair DHI-300 Waste Oil Heater (“Lanair heater”). (Doc. #58). The Plaintiffs assert that a defect in the Lanair heater caused the fire and offer the expert testimony of Carl Welcher (“Welcher”) and W. Alan Bullerdiek (“Bullerdiek”) in support of their contention.

A. *Lanair DHI-300 Waste Oil Heater*

To better understand the opinions offered by Welcher and Bullerdiek, the Court finds it instructive to first explore the general operating characteristics of a waste oil heater.² The Lanair heater was designed to use certain “waste oils,” such as 50-weight motor oil, as well as transmission and hydraulic fluids, as fuel to produce heat. As only vapors, not liquids, will burn, the fuel is atomized to a very fine spray when passed through a nozzle under pressure. The ideal fuel has a fixed viscosity and constant surface tension

²The following description of the general operating characteristics of a waste oil heater and the specific operating characteristics of the Lanair heater are derived from Bullerdiek’s Rule 26 Report. (Doc. #58, Ex. 8).

enabling it to atomize to very small droplets, thus maximizing vaporization. Ideal fuel burns cleanly with constant air pressure and a fixed secondary air shutter opening, giving a uniform size “fireball” which does not touch the walls of the combustion chamber and yields a constant heat output rate.

Unfortunately, waste oil is a non-ideal fuel as it contains substantial additive content which affects viscosity and surface tension. Therefore, waste oil heaters, including the Lanair heater, utilize an air/oil preheater design to warm the atomizing air and fuel oil to a predetermined temperature. Each manufacturer has its own heating design (usually patented) which attempts to achieve relatively uniform viscosity at the nozzle for firing. No heater design can account for the effects of surface-active agents or all viscosity index additives likely to be encountered, to achieve constant, near ideal combustion. Accordingly, waste oil heaters require manual adjustment along with “eyeball observation” of atomizing air pressure, oil fuel supply pressure and secondary air intake. These manual adjustments are necessary to sustain good combustion with the varying consistency of fuel supply.

B. Cause of the Fire

According to Welcher, the origin of the fire that occurred on the subject premises was the Lanair heater which had been mounted to the ceiling by metal brackets. (Doc. #58, Ex. 6). Welcher states that the Lanair heater fell to the floor during the fire and was subsequently found lying on its side. *Id.* Upon examining the Lanair heater, Welcher observed a large hole in the fire box. *Id.* After conducting an investigation of the premises following the fire, Welcher concluded: “The fire was accidental. The fire originated in the Lanair waste oil burner. The cause of the fire was a malfunction in the waste oil heater that resulted in the ignition of nearby combustibles.” *Id.* Welcher based his opinion on the origin of the fire on the “charred combustible materials in the area of the waste oil heater, burn patterns on the ceiling and walls

of the workshop and damage to the waste oil heater.” Id. Welcher based his opinion on the cause of the fire on the “consumed combustibles in the area of origin, damage to the interior of the waste oil heater, the lack of evidence that the fire was incendiary and his elimination of all other accidental and/or natural causes.” Id.

The Defendant asserts that Welcher is not qualified to offer an opinion as to whether or not there was a “malfunction” in the waste oil heater. (Doc. #58). The Defendant further contends that Welcher’s report is not factually supported as he fails to state alternate causes of the fire that he investigated and ruled out. (Doc. #58). Accordingly, the Defendant argues that Welcher’s expert opinion should be excluded on these grounds and, absent his testimony, the Plaintiffs are unable to establish a defect in the Lanair waste oil heater.

C. Thermal Sensing Device

Attached to the side of the Lanair heater’s combustion chamber, at approximately the midpoint, is a “fan limit switch.” (Dean’s Dep. 127:5-25). The fan limit switch turns the fan or the blower on and off. (Dean’s Dep. 128:6-9). Additionally, the fan limit switch shuts the burner down when the air inside the cabinet exceeds 200 degrees. Id.

In his Rule 26 Report, Bullerdiek contends that this “high temperature limit safety is located in the conditioned air segment of the furnace, and provides only indirect and limited protection from overfiring.” (Doc. #58, Ex. 8). Bullerdiek therefore implies that the fan limit switch is ineffective. Bullerdiek concludes that the Lanair heater is defective because:

The combustion chamber and primary heat exchange system should either have integral design protection against a reasonably foreseeable thermal insult, such as caused by

overfiring, or have a containment guard against release of excess fuel, combustion products, or thermal radiation to nearby combustible materials.

Id. In his deposition, Bullerdiek refined his opinion testifying that the Defendant should have added “some type of different limit switch or control” to the heater. (Bullerdiek Dep. 76:18-22). In their Opposition to the present Motion, the Plaintiffs’ contend that Bullerdiek opines that the Lanair heater was defective because the Defendant failed to affix a “thermal sensing device” to the rear of the heater. (Doc. #59).

Bullerdiek’s opinion appears to be derived from the following portions of his deposition:

Bullerdiek Dep. 76:18-22 provides:

Q: Okay. As I understand your report in this case, you are suggesting that there should have been some type of different limit switch or control on this heater?

A: Yes.

Bullerdiek Dep. 77:12-16 provides:

Q: Okay. You conceptually suggest that a certain type of component should be added to the DHI-300 heater, correct?

A: Yes. Or actually gave an alternative there is other potentialities, but –

Bullerdiek Dep. 156:2-20 (emphasis added):

A: Thermal safety switch. It is a type of switch; not the type in there now.

Q: If you put a commonly available thermal sensing switch on the backside of this unit, what, if anything, could that switch have done to prevent this fire?

* * * * *

A: If you provide such a switch so it is a non-resettable or it has to be manually resettable as opposed to automatic reset; it *could* provide that protection, yes.

The Plaintiffs argue in their Opposition that a “high temperature limit device located on the rear of the heater” would “shut down the heater in the event of a failure in the heat exchange system, such as occurred in this case.” (Doc. #59).

In his deposition, Bullerdiek admits that engineering protocols require him to test a heater which has been modified by another piece of equipment. (Bullerdiek Dep. 74:23-75:7). Bullerdiek further testified that “there is standard criteria and standard ways of applying for certain safety equipment to make sure it has levels of liability and operation. Obviously, if you put it on a specific heater, you want to check that out and see if it will work.” (Bullerdiek Dep. 79:19-80:1). Despite his admissions that engineering protocols and standard criteria require testing, Bullerdiek states that he did not conduct any tests on a Lanair heater modified by a thermal sensing device:

Bullerdiek Dep. 81:20-82:5 provides:

Q: Did you run any tests at all?

A: I have not. I should put that back. I have not done any tests specific to this device for this case. Have I run tests of the type that we are talking about? Oh, yes. I certainly have.

Q: But not specific to this device, have you, sir?

A: Specific to this heater, that is a true statement.

Additionally, Bullerdiek failed to produce any drawings, diagrams or models of a Lanair heater modified by a thermal sensing device. (Bullerdiek Dep. 81:16-19).

In their Opposition to the present Motion, the Plaintiffs argue that Bullerdiek does not need to conduct any testing or provide the Court with any drawings, diagrams or models of a Lanair heater modified by a thermal sensing device because a thermal sensing device is “a commonly available commercial item.” (Doc. #59). The Plaintiffs fail to cite any legal authority in support of their position. Despite the fact that Bullerdiek claims his opinion is based on generally accepted, prevailing norms in waste oil heater safety, Bullerdiek has failed to offer any photographs or models of other waste oil heaters with thermal sensing devices attached to the rear wall of the combustion chamber.

Finally, Bullerdiek testified in his deposition that the Lanair heater, as designed without the proposed thermal heating device, satisfies industry standards. Bullerdiek admits that the Lanair heater complied with Underwriters Laboratory standards in its design. (Bullerdiek Dep. 47:4-22). Bullerdiek further testified that he is not claiming that the Lanair heater deviated in any fashion from industry standards. (Bullerdiek Dep. 82:15-23).

D. Firebrick Target Wall

The wall opposite of where the burner throws out flames is known as the “target wall” of the combustion chamber. (Dean Dep. 32:23-33:2). Firebrick covers the lower half of the target wall. (Dean Dep. 35:6-8). The firebrick covering the lower half of the Lanair heater’s target wall is a “high velocity firebrick that includes two percent stainless steel needle” and is an inch and three quarters thick. (Dean Dep. 33:4, 35:9-12). Although the term implies individual bricks, the firebrick actually looks like a single brick or piece of concrete. (Dean Dep. 36:11-18). The hole in the back of the heater was above the firebrick. (Dean Dep. 35:2-5).

The Defendant’s service manager, Randall Dean, opined in his deposition that the hole in the back of the heater probably wouldn’t have occurred if the entire target wall had been covered in firebrick:

Q: Mr Dean, have you been able to determine or do you have any ideas of whether or not this hole that is in the back of this target wall would have been formed if the entire target wall was firebrick?

A: I would have to say it *probably* wouldn’t have been if it had been all firebrick.

(Dean Dep. 144:21-145:2) (emphasis added). Dean is a high school graduate and went to college for three years where he studied industrial technology. (Dean Dep. 4:11-19). After college, Dean worked in a

grocery store for six or seven years and then began selling and distributing wood stoves, chimneys, and ceiling fans. Id. Dean began working for the Defendant in 1986. Id.

The record does not reveal that Dean conducted any testing to prove his theory that firebrick would have prevented the large hole that formed in the back of the heater. Furthermore, Dean has not produced any drawings or models of the Lanair heater modified by firebrick covering the entire target wall to determine whether this modification was feasible and did not adversely affect the utility of the heater. Finally, there is no evidence in the record that industry standards require that the entire target wall of a waste oil heater be covered in firebrick.

The Plaintiffs contend that the heater was defective because it was “not sufficiently durable so as to allow a substantial breach to be made to the upper part of the target wall of the combustion chamber.” (Doc. #59). Essentially, the Plaintiffs contend that the hole in the back of the heater would have been prevented if the target wall had been covered entirely with firebrick. Id. The Plaintiffs attribute this opinion to Bullerdiek; however, the Plaintiffs fails to cite to either Bullerdiek’s Rule 26 Report or Bullerdiek’s deposition in support of this opinion. Rather, it appears that this is actually the opinion of Randall Dean.

Part I: Admissibility of Expert Testimony

The Defendant, through this Motion for Summary Judgement, challenges the admissibility of the expert testimony of Carl Welcher and W. Alan Bullerdiek. (Doc. #58). Without this expert testimony, Defendant argues that it is entitled to summary judgment because the Plaintiffs cannot prove the existence of a defect in the product. Id. Therefore, the Court must determine whether the testimony of these experts is admissible before considering whether the Defendant is entitled to summary judgment.

When considering the admission of expert testimony under the Federal Rules of Evidence, the trial judge acts as a “gatekeeper” ensuring that the expert’s testimony rests on a reliable foundation and is relevant before allowing such testimony. Wheeling Pittsburgh Steel Corp. v. Beelman River Terminals, Inc., 254 F.3d 706, 715 (8th Cir. 2001). “Decisions concerning the admission of expert testimony lie within the broad discretion of the trial court and these decisions will not be disturbed on appeal absent an abuse of that discretion.” Peitzmeier v. Hennessy Indus., Inc., 97 F.3d 293, 296 (8th Cir. 1996), *cert denied*, 520 U.S. 1196 (1997).

Expert testimony is governed by Federal Rule of Evidence 702 (“Rule 702”) which provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, or experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

This rule governing the admission of expert testimony is demonstrative of the “liberal thrust” of the Federal Rules and should be applied in accordance with “[the Federal Rules’] general approach of relaxing the traditional barriers to ‘opinion’ testimony.” Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 588 (1993) *quoting* Beech Aircraft Corp. v. Rainey, 488 U.S. 153, 169 (1988). Flexibility is the polestar guiding the trial court’s inquiry under Rule 702. Daubert, 509 U.S. at 594.

In Daubert, the Supreme Court applied the principles of Rule 702 to expert testimony based on scientific knowledge and held that expert testimony is generally admissible so long as it is relevant and reliable. Id. at 589. Expert testimony is relevant if it “will assist the trier of fact to understand or determine a fact in issue.” Id. at 592. The Court articulated four factors in Daubert for a trial court to consider when

determining the reliability of expert testimony based on scientific knowledge: (1) whether the theory or technique can be or has been tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) whether the theory or technique has a known or potential error rate and whether standards control the technique's operation; and (4) whether the theory or technique is generally accepted in the scientific community. *Id.* at 592-95. The Court noted that it did not “presume to set out a definitive checklist or test” by articulating these four factors, but rather intended to set forth some “general observations.” *Id.* at 593. The proper inquiry into the admissibility of expert testimony must be guided by the facts of the particular case. *Id.* at 591.

A. Admissibility of the Expert Testimony of Carl Welcher

The Plaintiffs have Welcher to offer his expert opinion regarding the fire's origin and cause. (Doc. #59). The Defendant contends that Welcher's testimony is inadmissible for three reasons: (1) Welcher lacks the requisite qualifications to offer his opinion; (2) Welcher's Rule 26 Report is deficient; and (3) Welcher has no foundation for his opinion that he eliminated all causes of the fire other than the heater. (Doc. #58). The Court finds that Welcher's opinion regarding the fire's origin and cause is admissible as it is relevant and rests on a reliable foundation; however, Welcher is not sufficiently qualified to offer his opinion regarding a potential “malfunction” in the Lanair heater.

A proffered expert witness must be properly qualified as an expert under Rule 702 by “knowledge, skill, or experience, training or education.” Welcher has been employed by Unified Investigation and Science as a full-time, private sector fire investigator for the past four years. (Doc. #59). Prior to that, Welcher was a fire investigator for the St. Louis County Police Department for nine years. *Id.* Welcher is presently a certified Fire Investigator and a certified Fire and Explosion Investigator. *Id.* He is a member

of the International Association of Arson Investigation (IAAI), Illinois and Missouri Chapters, the National Association of Fire Investigation (NAFI), the Professional Fire and Fraud Investigators Association (PFFIA), and the Greater St. Louis Claims Association. Id. Welcher has studied Fire Science at Forest Park Community College in St. Louis, Missouri since 1996. Id. He has attended numerous seminars related to fire investigation including: S.I.U. Seminar, Forest Park Community College (2002); Fire Investigation Seminar, Missouri Chapter IAAI (2001); UIS Investigation School/Investigations (2001); Fire and Arson Investigation, Illinois Chapter IAAI (2001); Principles of Electrical Investigation (2001); Fire Scene Evidence Collection & Preservation, St. Louis County and Municipal Police Academy; Fire Behavior and Building Construction, St. Louis County and Municipal Police Academy; Insurance Fraud, St. Louis County and Municipal Police Academy; and Fire Investigation, St. Louis County and Municipal Police Academy. Id. Based on Welcher's formal training, educational background and practical experience, this Court finds that Welcher is qualified to offer his expert opinion regarding the fire's origin and cause.

The Defendant contends that Welcher lacks the requisite knowledge, skill, experience, training and education to offer his expert opinion regarding whether or not the heater's "malfunction" was the cause of the fire. In his Rule 26 Report Welcher opined, "The fire was accidental. The fire originated in the Lanair waste oil burner. The cause of the fire was a malfunction in the waste oil heater that resulted in the ignition of nearby combustibles." (Doc. #58, Ex. 6). Welcher admitted in his deposition that he had no training in the mechanical design or manufacturing of a waste oil heaters and, therefore, was not competent to offer his opinion about the design and manufacture of waste oil heaters. (Welcher Dep. 22:22-24:24). However, Welcher contended that he could testify to a "visual problem" with a waste oil heater based on his practical

experience and general fire investigation training.³ (Welcher Dep. 23:4-7; 25:4-10, 26:4-11). Welcher observed a “big hole” in the fire box of the Lanair heater when he conducted his investigation into the cause of the fire. (Welcher Dep. 26:12-15). Welcher testified that the hole in the burner can was a “failure” of the heater and, therefore, the heater “malfunctioned.” (Welcher Dep. 26:22-29:5). However, Welcher was unable to definitively conclude and offer an opinion on whether the hole in the fire box was caused by the manufacture or design of the Lanair heater. (Welcher Dep. 29:6-18).

The Plaintiffs readily admit that Welcher “is not qualified to testify as to how or why the large hole in the target wall of the combustion chamber caused heat to escape or radiate from the Lanair heater.” (Doc. #59). Accordingly, the Plaintiffs concede that the word “malfunction” should not and will not be used by Welcher when he offers his opinion as to the origin and cause of the fire. Id. Although Welcher is not precluded from testifying about what he observed during a visual investigation of the scene, the Court agrees that Welcher is not qualified to offer an opinion as to what caused the hole in the target wall of the

³ Welcher Dep. 23:4-7 provides:

Q: Do you have any practical experience in the design of heaters?

A: Just by working fires with different types of heaters, I know the operation, how they work.

Welcher Dep. 25:4-10 provides:

Q: You don’t believe that you have the competency, if there has been a malfunction or a potential malfunction in any waste oil heater, to determine what the cause of that malfunction was or was not, correct?

A: Unless it is visual, you can see there is a problem.

Welcher Dep. 26:4-11 provides:

Q: Tell me what training, education or experience you have in determining malfunctions in waste oil heaters.

A: Well, my general fire investigation training can tell you that looking at the side there is a big hole in it.

Q: Do you know, sir –

A: I know it is not supposed to be there.

Lanair heater. Accordingly, Welcher will be precluded from using the word “malfunction” as it implies some sort of design or manufacturing defect to which Welcher is not qualified to offer an opinion.

The Defendant’s remaining arguments that Welcher’s testimony should be excluded address the credibility, rather than the admissibility, of Welcher’s opinion regarding the origin and cause of the fire. The Defendant contends that Welcher’s testimony should be excluded because his Rule 26 Report was deficient for a variety of reasons including: Welcher’s admission in his deposition that he interviewed Townes Staton as part of his investigation, but failed to mention this interview in his report; Welcher arrived at his opinion on March 30, 2004, roughly one month after the fire; Welcher’s opinion does not rely upon additional documents and deposition testimony received after March 30, 2004; and Welcher was asked to “beef up” his report by Plaintiffs’ counsel. (Doc. #58). Additionally, the Defendant asserts that Welcher’s opinion should be excluded because Welcher has failed to offer any factual support for his conclusory statement that he eliminated all causes of the fire other than the heater. Id.

The Court finds that Welcher is qualified to offer his expert opinion regarding the fire’s origin and cause. Furthermore, the Court finds that the other arguments raised by the Defendant relate to the credibility of Welcher’s testimony, rather than his qualifications to offer his opinion. Therefore, Welcher’s expert opinion on the fire’s origin and cause is admissible. However, Welcher is not qualified to offer his opinion as to the existence of a “malfunction” in the Lanair heater.

B. Admissibility of the Expert Testimony of W. Alan Bullerdiek

The Plaintiffs’ have retained Bullerdiek to offer his expert opinion that the Lanair heater was defective. (Doc. #59). The Defendant claims that Bullerdiek’s testimony is inadmissible for three reasons: (1) there is no factual basis for Bullerdiek’s opinions; (2) Bullerdiek’s opinions are not reliable or valid as

a matter of law; and (3) Bullerdiek's Rule 26 disclosure report fails to disclose all of his opinions and the facts upon which he relies. (Doc. #58). The Court is not convinced that Bullerdiek's opinion is sufficiently reliable to present to a jury. Accordingly, Bullerdiek's purportedly "expert" testimony is inadmissible under the standard set forth in Rule 702 and refined in Daubert.

Bullerdiek's precise opinion as why the Lanair heater was defective is not readily apparent from the face of his Rule 26 Report. The Defendant states that Bullerdiek's report identified three ways in which the Lanair heater was defective:

(1) The combustion chamber and primary heat exchange system should either have integral design protection against a reasonably foreseeable thermal insult, such as caused by overfiring, or have a containment guard against release of excess fuel, combustion products, or thermal radiation to nearby combustible materials. (Bullerdiek's Report, Doc. #58, Ex. 8 at pg. 10).

(2) The Lanair unit has no automatically controlled, variable primary air pressure or fuel pressure regulation to assist in regulating the burner output characteristics. (Bullerdiek's Report, Doc. #58, Ex. 8 at pg. 11).

(3) The Lanair heater should have been able to continue to function, or shut down safely when operated at the maximum listed firing rate and within the limits of the operating and safety controls. (Bullerdiek's Report, Doc. #58, Ex. 8 at pg. 13).

In his deposition, Bullerdiek focuses his opinion regarding the alleged defect in the Lanair heater, opining that the Defendant should have added "some type of different limit switch or control" to the heater. (Bullerdiek Dep. 76:18-22). In their Opposition to the present Motion, the Plaintiffs' state that Bullerdiek is of the opinion that "a thermal sensing device" should have been attached to the rear of the heater. (Doc. #59 at ¶101). Apparently, this "high temperature limit device located on the rear of the heater" would "shut down the heater in the event of a failure in the heat exchange system, such as occurred in this case." (Doc. #59).

Pursuant to Rule 702, the Court must be convinced that an expert's testimony rests on a reliable foundation and is relevant before allowing the expert's opinion to be presented to a jury. See Wheeling Pittsburgh Steel Corp., 254 F.3d at 715. The Supreme Court articulated four factors in Daubert for a trial court to consider when determining the reliability of expert testimony based on scientific knowledge: (1) whether the theory or technique can be or has been tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) whether the theory or technique has a known or potential error rate and whether standards control the technique's operation; and (4) whether the theory or technique is generally accepted in the scientific community. Daubert, 509 U.S. at 592-95. Here, Bullerdiek's opinion that the Lanair heater was defective because it did not have a thermal sensing device is not reliable because Bullerdiek has not tested his theory; he has not produced any conceptualizations of a Lanair heater modified by a thermal sensing device; he has not established that comparable waste oil heaters are designed with this device; and he has admitted that the Lanair heater, as presently designed, satisfies industry standards.

Bullerdiek's theory that the heater should have had a thermal sensing device to prevent the type of fire that occurred in this case could be tested. Bullerdiek admitted in his deposition that engineering protocols require him to test a heater which has been modified by another piece of equipment. (Bullerdiek Dep. 74:23-75:7). Bullerdiek further testified that "there is standard criteria and standard ways of applying for certain safety equipment to make sure it has levels of liability and operation. Obviously, if you put it on a specific heater, you want to check that out and see if it will work." (Bullerdiek Dep. 79:19-80:1). Despite Bullerdiek's admission that adding a piece of safety equipment, such as a thermal heating device, to an already existing piece of equipment, such as a Lanair heater, requires testing under both "engineering

protocols” and “standard criteria and standard ways” to determine effectiveness, Bullerdiek freely admitted in his deposition that he did not conduct any testing in this case. (Bullerdiek Dep. 81:20-82:5).

Not only did Bullerdiek fail to test the Lanair heater with the attached thermal heating device to determine if it would function to prevent a fire like the one that occurred in the present case, he failed to produce any drawings or models of the modified Lanair heater to demonstrate its utility. (Bullerdiek Dep. 81:16-19). In Unrein v. Timesavers, Inc., 394 F.3d 1008, 1012 (8th Cir. 2005), the Eighth Circuit affirmed a district court’s exclusion of an expert’s testimony finding that the expert’s opinion lacked sufficient reliability because he failed to prepare drawings showing how the safety device would be integrated into the allegedly defective product or present photographs showing the device’s use with similar machines. The court held, “An expert proposing safety modifications must demonstrate by some mean that they would work to protect [against personal injury and property loss], but would not interfere with the machine’s utility.” Unrein, 394 F.3d at 1012. Here, Bullerdiek has not submitted any drawings illustrating how the thermal heating device would be integrated into the Lanair heater. Accordingly, Bullerdiek has failed to demonstrate that the thermal heating device would prevent the type of fire that caused the property loss in this case without interfering with the utility of the waste oil heater.

Bullerdiek’s theory that the Defendant should have attached a thermal heating device to the target wall of the Lanair heater purportedly rests on generally accepted, prevailing norms in waste oil heater safety. Bullerdiek testified in his deposition that in arriving at his opinion, he was using “known techniques applied to heating equipment throughout the world.” (Bullerdiek Dep. 77:5-7). Bullerdiek further testified that “we know there are existing items in the field, commercially available which, if applied, would prevent this kind of accident.” (Bullerdiek Dep. 80:16-21). Based on these statements, the Plaintiffs argue that the

thermal heating device is “a commonly available commercial item” and, therefore, “the device needs no design or drawing because it is something that is already available.” (Doc. #59). However, Bullerdiek’s insinuations and bare assertions are insufficient to establish that thermal heating devices are widely used in waste oil heaters to prevent the type of fire that occurred in this case. If Bullerdiek’s opinion relies on the safety measures taken by other manufacturers, he must demonstrate what other manufacturers are actually doing by presenting photographs or models of other units. Absent such proof, this Court does not find Bullerdiek’s reliable as he is unable to establish that his theory is generally accepted in the design of waste oil heaters.

Finally, Bullerdiek testified that the Lanair heater, as designed without the proposed thermal heating device, satisfies industry standards. Bullerdiek admits that the Lanair heater complied with Underwriters Laboratory standards in its design. (Bullerdiek Dep. 47:4-22). Bullerdiek testified that he is not claiming that the heater deviated in any fashion from industry standards that apply to the manufacturers of waste oil heaters. (Bullerdiek Dep. 82:15-23). Bullerdiek’s admission that the Lanair heater, as presently designed, satisfies the standards which govern waste oil heaters diminishes the reliability of Bullerdiek’s opinion that a thermal heating device should have been installed on the Lanair heater.

Upon consideration of two of the four factors articulated in Daubert, this Court finds that Bullerdiek’s opinion is not sufficiently grounded to be helpful to the jury. First, Bullerdiek did not test his opinion by attaching a thermal heating device to a Lanair waste oil heater to determine if such a device would have prevented the fire that caused the property loss in the present case. The Court is not convinced that it would even be possible to integrate a thermal heating device into a Lanair heater without compromising its utility as Bullerdiek failed to present any drawings or models of a Lanair waste oil heater

modified by a thermal heating device. Second, although Bullerdiek contends that his opinion is supported by known techniques applied to heating equipment throughout the world, he failed to produce a photograph or any other evidence of a single waste oil heater with a thermal heating device. Bullerdiek's opinion, by his own admission, is inconsistent with prevailing standards that control the manufacture of waste oil heaters as the Lanair heater, presently designed without a thermal heating device attached at the rear, satisfies the Underwriters Laboratory standards of design and does not deviate from industry standards. Accordingly, Bullerdiek's opinion has not been generally accepted by the designers of waste oil heaters and is inconsistent with the standards that govern the design of waste oil heaters. Based on the foregoing analysis, Bullerdiek's testimony is inadmissible.

Part II: Summary Judgment

The Defendant filed this Motion for Summary Judgment pursuant to Rule 56(c) of the Federal Rules of Civil Procedure. According to this Rule, summary judgment is appropriate when the "pleadings, depositions, answers to interrogatories and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). When considering this Motion, the Court views all facts in the light most favorable to the Plaintiffs and gives them the benefit of all reasonable inferences. *See Prudential Ins. Co. v. Hinkel*, 121 F.3d 364, 366 (8th Cir. 1997). The Court will not weigh the credibility of the evidence, but rather will focus on whether a genuine issue of material fact exists for trial. *Roberts v. Browning*, 610 F.2d 528, 531 (8th Cir. 1979); *United States v. Porter*, 581 F.2d 698, 703 (8th Cir. 1978).

The Defendant bears the burden of proving the absence of disputed material facts. *See Prudential Ins. Co.*, 121 F.3d at 366. The burden then shifts to the Plaintiffs to "set forth specific facts showing that

there is a genuine issue for trial.” Fed. R. Civ. P. 56(e). If the Plaintiffs fail to establish a factual dispute on an essential element of their case, the Court will proceed to determine whether the Defendant is entitled to judgment as a matter of law. *See E.E.O.C. v. Woodbridge Corp.*, 263 F.3d 812, 814 (8th Cir. 2001).

The summary judgment rule is intended “to isolate and dispose of factually unsupported claims” and should be applied to accomplish this purpose. *Prudential Ins. Co.*, 121 F.3d at 366. In the interest of promoting judicial economy, summary judgment should be granted to prevent the trial of cases lacking a genuine issue of material fact. *Inland Oil and Transp. Co. v. U.S.*, 600 F.2d 725, 728 (8th Cir. 1979).

A. The Defendant is entitled to summary judgment on the Plaintiffs’ product liability claims because the Plaintiff has failed to prove the existence of a product defect.

The Plaintiffs have asserted claims for strict liability and implied warranty. (Doc. #36). To recover under a theory of strict liability, the Plaintiffs must prove that the Lanair heater was in a “defective condition unreasonably dangerous when put to a reasonably anticipated use.” MAI 25.04 (West 2002) (Verdict Director – Strict Liability – Product Defect). A claim for implied warranty requires the Plaintiffs to prove that the Lanair heater was not free from defects, but rather was defective, at the time the Defendant sold the product to the Plaintiffs. *See* MAI 25.03 (West 2002) (Verdict Director – Breach of Common Law Implied Warranty of Fitness for a Particular Purpose Under Uniform Commercial Code); MAI 25.08 (West 2002) (Verdict Director–Breach of Implied Warranty of Merchantability Under Uniform Commercial Code). Therefore, to recover on these claims, the Plaintiffs must prove that the Lanair waste oil heater was defective, either as manufactured or designed. *See Keener v. Dayton Electric Mfg. Co.*, 445 S.W.2d 362, 364 (Mo.1969) (recognizing cause of action for defectively manufactured products); and

Blevins v. Cushman Motors, 551 S.W.2d 602 (Mo.1977) (en banc) (recognizing cause of action for defectively designed products).

Missouri law requires the Plaintiffs to offer sufficient evidence to support every element of each of their claims. See Willard v. Bic. Corp., 788 F.Supp. 1059, 1063 (W.D. Mo. 1991). The finding of a defect in a products liability case cannot rest on conjecture or speculation. See Crum v. MacNaught P.T.Y. Ltd., 743 S.W.2d 532, 534 (Mo. App. 1987). Where a plaintiff is claiming that the design of a complicated piece of machinery is defective, expert testimony is appropriate. See Kayser v. Rockwell Graphic Systems, Inc., 666 F.2d 1233, 1236 (8th Cir. 1981).

In the present action, the design of a waste oil heater is not within the realm of the average juror's experience or knowledge. Thus, without expert testimony, it would be impossible for ordinary jurors to render a decision as to whether the Lanair heater's design was unreasonably dangerous without resorting to speculation or conjecture. Accordingly, the Court concludes that, absent expert testimony, the Plaintiffs' cannot establish that the Lanair heater was in a defective condition which was unreasonably dangerous when put to its reasonably anticipated use. See Leonard v. Bunton Co., 925 F.Supp. 637, 641 (E.D. Mo. 1996).

1. *Thermal Sensing Device*

The Plaintiffs assert that the Lanair heater was defective because it lacked a thermal sensing device attached to the target wall of the heater.⁴ The Court concluded, *infra*, that Bullerdiek's opinion regarding the attachment of the thermal sensing device to the target wall of the Lanair heater is not sufficiently reliable to be presented to the jury because: Bullerdiek failed to conduct any testing of his theory; he failed to produce any drawings or models of a Lanair heater modified by a thermal sensing device; he failed to produce any photographs or other evidence of other waste oil heaters with thermal sensing devices; and the Lanair heater, without the thermal sensing device, complies with industry standards. The Plaintiffs' argument that the Lanair heater was defective because it lacked a thermal sensing device is not properly supported by expert testimony. Accordingly, the Plaintiffs' have failed to present sufficient evidence that the Lanair heater was defective because a thermal sensing device was not attached to its target wall.

2. *Firebrick Target Wall*

The Plaintiffs' further argue that the heater was defective because it was "not sufficiently durable so as to allow a substantial breach to be made to the upper part of the target wall of the combustion chamber." (Doc. #59). Essentially, the Plaintiffs' contend that the hole in the back of Plaintiffs' heater could have been prevented had the target wall of the heater been covered entirely with firebrick. *Id.* The Plaintiffs' attribute this opinion to Bullerdiek. *Id.* However, the Plaintiffs fail to cite to either Bullerdiek's Report (Doc. #58, Ex. 8) or Bullerdiek's deposition in support of this opinion. *Id.* Rather, it appears that

⁴The Court notes that the Lanair waste oil heater was equipped with a device called a "fan limit switch" that was designed to turn the blower on and off and shut the burner down when the air inside the cabinet exceeded 200 degrees. (Dean Dep. 128:6-9, 23-25).

this is actually the opinion of Randall Dean, Lenan's service manager. (Doc. #59). In his deposition, Dean opined that the hole in the target wall of the Lanair heater "probably" wouldn't have occurred had the entire target wall been covered in firebrick. (Dean's Dep. 144:21-145:2).

However, Dean does not appear to be qualified to offer this opinion nor is his purported opinion sufficiently reliable to be submitted to the jury. Dean graduated from high school and attended college for three years studying industrial technology. (Dean's Dep. 4:11-19). Following college, he worked in a grocery store for six or seven years and then began selling and distributing wood stoves, chimneys, and ceiling fans. Id. Dean began working for the Defendant in 1986 and is presently the Defendant's service manager. Id. Accordingly, it appears that Dean lacks the requisite qualifications to offer his opinion regarding the design of the Lanair heater.

Furthermore, there is no factual basis for Dean's opinion. There is no evidence that Dean tested the Lanair heater to determine if the firebrick would have prevented the hole in the target wall of the heater. There is no evidence that Dean has produced any conceptualizations of his proffered design of the Lanair heater with firebrick entirely covering the target wall. Finally, there is no evidence that industry standards dictate the installation of firebrick on the entire target wall. Therefore, Dean's opinion that the Lanair heater should have been designed with firebrick covering the entire target wall is not sufficiently reliable to be submitted to a jury.

Therefore, the Plaintiffs' have failed to offer reliable expert testimony that the Lanair heater was defective either because it lacked a rear-mounted thermal sensing device or because it was not designed with firebrick entirely covering the target wall. As the Plaintiffs' have failed to present sufficient evidence

from which a jury could conclude that the Lanair heater was defective, the Defendant is entitled to Summary Judgment on the Plaintiffs' claims for strict liability and implied warranty.

B. The Defendant is entitled to summary judgment on the Plaintiffs' negligence claims because the Plaintiff has failed to prove that the Defendant breached its duty of care to protect the Plaintiffs from injury.

The Plaintiffs also assert two negligence claims in their complaint. (Doc. #36). In Count III, the Plaintiffs assert a claim for "negligent manufacture, design or failure to warn" and in Count IV, the Plaintiffs assert a claim for "negligently supplying dangerous instrumentality." *Id.* Where a plaintiff is injured by a product, the plaintiff may assert claims for negligence and strict liability. *See Morrison v. Kubota Tractor Corp.*, 891 S.W.2d 422, 425 (Mo. App. 1994). The Missouri Supreme Court has distinguished the claims by noting that "in strict liability we are talking about the condition (dangerousness) of an article which is designed in a particular way, while in negligence we are talking about the reasonableness of the manufacturer's action in designing and selling the article as he did." *Blevins*, 551 S.W.2d at 608 (internal citations omitted). Whereas strict liability focuses on the product, negligence focuses on the conduct of the manufacturer or seller. *Hill v. Air Shields, Inc.*, 721 S.W.2d 112, 117 (Mo. App. 1986). A negligence theory requires the Court to consider the "the presence of fault or the existence of knowledge." *Id.*

In an action for negligence, generally, a plaintiff must allege ultimate facts which if proven, show: (1) the existence of a duty on the part of the defendant to protect the plaintiff from injury; (2) failure of the defendant to perform that duty; and (3) injury to the plaintiff resulting from such failure. *Scheibel v. Hillis*, 531 S.W.2d 285, 288 (Mo. 1976) (en banc). To recover on their claim for "negligent manufacture, design or failure to warn," the Plaintiffs must establish that the Defendant "failed to use ordinary care to either manufacture and/or design the [Lanair heater] to be reasonably safe or to adequately warn of the risk of

harm from [the alleged defect in the Lanair heater].” MAI 25.09 (West 2002) (Verdict Director – Products Liability – Negligent Manufacture, Design, or Failure to Warn). To recover on their claim for “negligently supplying dangerous instrumentality,” the Plaintiffs must prove that the “defendant knew or had information from which defendant, in the exercise of ordinary care, should have known of such dangerous condition.” MAI 25.10(A) (West 2002) (Verdict Director – Negligently Supplying Dangerous Instrumentality).

The Defendant contends that the Plaintiffs have failed to establish that the Defendant breached its duty of care in designing, manufacturing or adequately warning consumers about the product and that breach was the proximate cause of the Plaintiffs’ damages. (Doc. #58). The Defendant further contends that the Plaintiffs have failed to prove that the Defendant knew or had reason to know that the product was likely to be dangerous for the use for which it was supplied. *Id.* In their Opposition, the Plaintiffs do not contest the Defendant’s argument that the evidence fails to support their negligence claims. (*See* Doc. #59). Accordingly, summary judgment will be granted in favor of the Defendant on the Plaintiffs’ claims for “negligent manufacture, design or failure to warn” and “negligently supplying dangerous instrumentality.”

Part III: Limitation of Plaintiff’s Damages

Finally, the Defendant contends that the Plaintiffs’ damages should be limited to a maximum of \$353,000 because only that portion of the claimed amount is supported by admissible evidence. (Doc. #58). Because the Court has concluded that the Defendant is entitled to Summary Judgment on all four of the Plaintiffs’ claims, this Court need not determine the merits of the Defendants’ argument limiting Plaintiffs’ damages.

CONCLUSION

The Plaintiffs have failed to prove the existence of a defect in the Lanair heater because their proffered expert testimony is inadmissible under the Rule 702 standard as refined by Daubert. Welcher lacks the requisite qualifications to testify as to whether or not a “malfunction” in the Lanair heater caused the fire. Bullerdiek’s opinion that the Lanair heater should have had a thermal sensing device is not sufficiently reliable to be presented to a jury. Finally, Dean is not qualified to offer an expert opinion as to whether or not covering the entire target wall of the Lanair heater with firebrick would have prevented the fire. Accordingly, the Plaintiffs have failed to present sufficient evidence from which a jury could conclude that the Lanair heater was defective. Additionally, the Plaintiffs have failed to challenge the Defendant’s argument that the evidence fails to support their negligence claims. Therefore, based on the foregoing analysis, the Defendant’s Motion for Summary Judgment is GRANTED.

IT IS SO ORDERED.

/s/ Gary A. Fenner
GARY A. FENNER, JUDGE
United States District Court

DATED: December 12, 2005